

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0001] of the published application with the following replacement paragraph:

Technical Field

[0001] The invention relates to a device and a process for temperature regulation of sections of the interior of an aircraft. The invention particularly relates to a device and a process for temperature regulation of an aircraft cabin into which tempered engine bleed air is introduced from the power unit of the aircraft.

Please replace paragraph [0002] of the published application with the following replacement paragraph:

Background of the Invention

[0002] In the current state of technology, it is established practice for aircraft cabins to be divided up into different sections or zones. The cabin temperature can be regulated in the individual zones. In order to heat the aircraft cabin, ventilation air taken from a mixing chamber is mixed with hot engine bleed air and then blown into the zone of the cabin in question. Regulation of the cabin temperature is controlled by means of a central cabin temperature regulator. For this, a pre-specified nominal cabin temperature is compared with the actual value shown by a cabin temperature sensor. A control deviation of the cabin temperature results from the difference between the nominal and the actual value. Δ [[An]] nominal value for the input air temperature in the cabin is determined by the characteristics of the cabin and the control deviation. This nominal value for the input air temperature is compared with the value measured by a temperature sensor in the input air supply line. A further control deviation for the input air

temperature is given by the difference. This control deviation is leveled levelled out by the controlled mixing of hot bleed air by means of a mixer valve.

Please replace paragraph [0008] of the published application with the following replacement paragraph:

Summary of the Invention

[0008] The invention therefore arises from the problem of providing a device and a process for regulating temperature in sections of the interior of an aircraft which reduce or eradicate these disadvantages.

Please replace paragraph [0022] of the published application with the following replacement paragraph:

[0022] The air which is cooler than the engine bleed air supplied to the mixer valve preferably comes from a mixing chamber. When controlling the heating units, the regulator unit preferably takes into account the nominal temperatures, the actual temperatures and a characteristic of each section such as the air volume of the section.

Please replace paragraph [0030] of the published application with the following replacement paragraph:

Brief Description of the Drawings

[0030] In the following figures figure, two embodiments versions of the invention are illustrated schematically in wiring diagrams:

Please replace paragraph [0033] of the published application with the following replacement paragraph:

Detailed Description

[0033] The device in accordance with the invention illustrated in FIG. 1 serves to regulate the temperature of sections Zone 1, Zone 2, . . . Zone n (shown by hatches) of the interior of an aircraft. This device has a controlled mixer valve MV for the mixing of engine bleed air and air which is cooler than the engine bleed air which comes from a mixing chamber (not illustrated any further). At the outlet of the mixer valve MV pre-tempered mixed air ML flows out. A distribution line DL is connected to the outlet of the mixer valve MV which is connected by at least two supply lines L1, L2, Ln to the respective sections Zone 1, Zone 2, . . . Zone n. In the supply lines L1, L2, Ln close to entrances to the respective sections Zone 1, Zone 2, . . . Zone n, individual electric heating units H1, H2, Hn assigned to the respective sections Zone 1, Zone 2, . . . Zone n are positioned. In the individual sections Zone 1, Zone 2, . . . Zone n, the temperature sensors S1, S2, . . . Sn assigned to these are positioned for the respective actual temperatures Tactual-Zone 1, Tactual-Zone 2, . . . Tactual-Zone n. Moreover, in the individual sections Zone 1, Zone 2, . . . Zone n, manually operated transmitters G1, G2, . . . Gn are either also provided for the respective nominal temperatures Tnominal-Zone 1, Tnominal-Zone 2, . . . Tnominal-Zone n, or these transmitters G1, G2, . . . Gn are provided at a central point. Moreover, the transmitters G1, G2 . . . Gn can also be electronically adjustable signal transmitters.

Please replace paragraph [0043] of the published application with the following replacement paragraph:

[0043] In summary Basically, the input air can be pre-heated for numerous zones by means of a common bleed air mixer valve. We claim: